NWS: EHB-6, Software Note 20
DoD: TO 31P1-4-108-602
FAA: EEM Modification Handbook 6345.1 CHG 31, Chap 28

RDA SOFTWARE BUILD 10.3 LOAD INSTRUCTIONS AND 4A23 TEST ATTENUATOR CALIBRATION PROCEDURES

DOPPLER METEOROLOGICAL RADAR WSR-88D

DoD Distribution Statement A - Approved for public release; distribution is unlimited.

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FAA APPROVAL

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1. SUBJECT

Radar Data Acquisition (RDA) Software Build 10.3 Load Instructions and 4A23 Test Attenuator Calibration Procedures.

2. PURPOSE

The present RDA maintenance manual procedures for calibrating the Test Attenuator (UD4A23) can cause a 1.5 dB error in the RFD1 reflectivity calibration, resulting in an approximate overall reflectivity error of 0.5 dB. Build 10.3 software will correct this deficiency. This document is issued as a result of Radar Operation Center (ROC) Engineering Change Proposal (ECP) 0159, RF Test Attenuator 4A23 Calibration Problem.

For additional information concerning this document, contact the ROC Hotline, Norman, OK; phone number: (800) 643-3363 or (405) 366-2980 or by e-mail at NEXRAD.Hotline@noaa.gov. An electronic copy of this document can be found at the following Internet address:
www.roc.noaa.gov/ssb/sysdoc/techman/tmlinks.asp

3. SITES AFFECTED

See ATTACHMENT 3 for site effectivity.

4. ESTIMATED COMPLETION DATE

This modification must be completed and reported no later than 60 days after receipt of this document.

5. EQUIPMENT AFFECTED

Radar Data Acquisition Group.

6. SPARES AFFECTED

Not applicable.

7. MODIFICATION ACCOMPLISHED BY

Site electronics systems analyst and/or electronics technician will accomplish this task. One technician is required to perform these procedures.

8. MATERIAL REQUIRED

The following kit will be required to install Software Build 10.3.

Nomenclature	Qty
RDA Applications Tape	1
Software Tape Matrix	1

9. SOURCE OF MATERIALS

The items in paragraph 8 will be shipped to each site by the National Weather Service (NWS) ROC.

10. SPECIAL TOOLS AND TEST EQUIPMENT REQUIRED

Not applicable.

11. TIME AND PERSONNEL REQUIRED

Work Phases	Work-hours
Coordination/Backup	1.0
Installation	3.0
Assembly	0.0
Operational Check	0.5
Total Work-hours	4.5

12. DOCUMENTS AFFECTED

Not applicable.

13. VERIFICATION STATEMENT

This modification was successfully installed at WFO Amarillo, TX.

14. DISPOSITION OF REMOVED AND REPLACED PARTS/MATERIALS

Not applicable.

15. PROCEDURES

Perform the procedures in ATTACHMENT 1, Software Build 10.3 Load Instructions, and ATTACHMENT 2, Snapshot Instructions.

The NEXRAD site Unit Radar Committee (URC) chairman must coordinate downtime with all dedicated users in accordance with Interagency NEXRAD Operation Memorandum of Agreement (MOA).

- ATTACHMENT 1, RDA Software Build 10.3 Load Instructions
- ATTACHMENT 2, Snapshot Instructions

16. FAA DISTRIBUTION

This directive is distributed to selected offices and services within Washington headquarters, the William J. Hughes Technical Center, the Mike Monroney Aeronautical Center, regional Airway Facilities divisions, and Airway Facilities field offices having the following facilities/equipment: NXRAD.

17. CHANGES TO TABLE OF CONTENTS (FAA)

This chapter will be included in the next revision to the table of contents for FAA Order 6345.1, Electronic Equipment Modification Handbook - Next Generation Weather Radar (NEXRAD).

To obtain additional copies of this publication, contact Printing and Distribution Team, AMI-700B, at (405) 954-3771.

18. RECOMMENDATIONS FOR CHANGES (FAA)

Forward any recommendations for changes to this directive through normal channels to the National Airway Systems Engineering Division, AOS-200, Operational Support.

19. REPORTING INSTRUCTIONS

a. NWS

Report completed modification on WS Form A-26, Engineering Management Reporting System Maintenance Record, according to the instructions in Engineering Handbook No. 4 (EHB-4), Engineering Management Reporting System (EMRS), part 2 and Appendix G. Include the following information on the WS Form A-26:

- An Equipment Code of RDA in Block 7.

- The appropriate serial number in Block 8.

- A Mod No. of S20 in Block 17a.

See ATTACHMENT 5 for a completed sample of WS Form A-26.

b. DoD

Update the AFTO Form 95 to show TCTO compliance. Report TCTO compliance in accordance with TO 00-20-2, Table 3-10, Rule 9.

c. FAA

Enter this directive number, date, and chapter number on the appropriate FAA Form 6032-1, Airway Facilities Modification Record.

Use the Maintenance Management System (MMS) application Log Equipment Modification (LEM) function to report the completion of this modification. Verify N is in the REP COD field to ensure the log entry will be upward reportable to the national data base for access by AOS. This directive should be entered into the LEM fields as follows:

(1) Order No.: 6345.1

(2) Chapter: 28

(3) Change: 31

d. DoD and FAA

Complete ATTACHMENT 4, and return the information to the ROC by one of the methods below:

(1) Mail Address: Program Branch, Retrofit Management Team
WSR-88D Radar Operations Center
3200 Marshall Ave., Suite 101
Norman, Oklahoma 73072-8028

(2) Fax Number: (405) 366-6553
ATTN: Retrofit Management Team

(3) E-mail Address: NEXRAD.Logistics@noaa.gov

(4) Web Address: http://www.roc.noaa.gov/ssb/logistics/completion.asp

NWS: EHB-6, Software Note 20
DoD: TO 31P1-4-108-602
FAA: EEM Modification Handbook 6345.1 CHG 31, Chap 28

ATTACHMENT 1

SOFTWARE BUILD 10.3 LOAD INSTRUCTIONS

Technical Manual Required:

Maintenance Instructions, Radar Data Acquisition (RDA), dated May 15, 2002
NWS: EHB 6-510, Revision 2
DoD: AF TO 31P1-4-108-152, Revision 2
FAA: Order 6345.1 V7, Revision 2

Materials Required:

2 Blank SCSI tapes for DoD and NWS sites
4 Blank SCSI tapes for FAA redundant sites
RDA Application tape, Build 10.3

Initial Conditions:

Maintenance Note 30, AF TO 31P1-4-108-589, FAA Order 6345.1, CHG 22, Chap 19, titled NOISE SOURCE, RF TEST ATTENUATOR, AND SOLAR CALIBRATION, requires the RF Test Attenuator to be successfully calibrated. The present software before this change had problems. If Maintenance Note 30, AF TO 31P1-4-108-589, FAA Order 6345.1, CHG 22, Chap 19 has NOT been accomplished because of this deficiency, perform Maintenance Note 30, AF TO 31P1-4-108-589, FAA Order 6345.1, CHG 22, Chap 19 AFTER successfully completing the procedures below. If Maintenance Note 30, AF TO 31P1-4-108-589, FAA Order 6345.1, CHG 22, Chap 19 HAS been accomplished, it is not necessary to repeat Maintenance Note 30, AF TO 31P1-4-108-589, FAA Order 6345.1, CHG 22, Chap 19 after the completion of the following procedures.

Step	Action/Procedure	Response/Comments
1	Perform the following steps to log baseline measurements of the RFD deltas in OPERATE mode.	
a. (RPG HCI)	At the RPG Control/Status window, record delta CALIB _____DB	CALIB is the Delta SYSCAL.
b. (RPG HCI)	At the RPG HCI click on **RDA Performance Data**.	RDA Performance Data Window will open.
c. (RPG HCI)	At the **RDA Performance Data** window click on the **Calibration** button.	RDA Calibration Performance Data window will open.

ATTACHMENT 1 (Continued)

SOFTWARE BUILD 10.3 LOAD INSTRUCTIONS

Step	Action/Procedure	Response/Comments
d.	Record the following LIN deltas: RFD1 delta _____ Test TGT delta _____	The displayed Test TGT delta should be 0 +/- 0.5dBZ. If this is not the case, the system is not calibrating properly. This condition should be corrected before proceeding using existing procedures within NWS EHB 6-510, DoD AF TO 31P1-4-108-152, FAA Order 6345.1 V7, and/or Hotline assistance. Note the absolute amplitude of RFD1 delta. If it is 1.0 or greater, this is a sure sign the RF Test Attenuator is mis-calibrated due to a deficiency in RDASOT which this software build corrects.
2 (RPG HCI)	At the RPG Control/Status window, if under the Archive Base Data box, the status is record, click on the **Stop** button. Wait for the current volume scan to finish before continuing. The status will change to LOADED.	Cancel Archive II data collection if active.
3 (RPG HCI)	In the RDA box, click on the CONTROL box.	
4 (RPG HCI)	Click on the **Standby** button under the RDA state. A popup window will appear asking `You are about to change the RDA status. Do you want to continue?` Click on the **Yes** button.	Places the radar in standby. For redundant sites, this prevents crosstalk between the two RDAs with different builds.
a.	For FAA redundant sites, place both RDAs in standby at this time, then return to Channel 1 RDA for the first time through these procedures. Make the channel you are loading Build 10.3 on the controlling channel.	
b. (RPG HCI)	At the RDA Control/Status window, click on the **Offline Operate** button, and when prompted click on the **Yes** button, then wait 5 minutes.	Places the radar in offline operate. The radar begins its 8 hour calibration sequence every 2.5 minutes.

ATTACHMENT 1 (Continued)

SOFTWARE BUILD 10.3 LOAD INSTRUCTIONS

Step	Action/Procedure	Response/Comments
c. (RPG HCI)	At the RDA Control/Status window, click on the **Standby** button.	Places the radar back into standby.
d. (RPG HCI)	At the RDA Control/Status window, click on the **Operate** button.	Places the radar into operate.
5 (RPG HCI)	Select the **Alarms** box in the RDA box. Make a copy of the alarms using Snapshot (see ATTACHMENT 2). Close the window when the snapshots are completed.	See attachment 2 for procedures for using Snapshot. Logs any alarms that occurred while the radar was in offline operate.
6 (RPG HCI)	In the RDA Control/Status window, under RDA Control, click **Enable Local (RDA)** button.	Enables control at the RDA.
	NOTE The following steps require action at the RDA maintenance terminal, Applications screen.	
7 (RDA Term)	If Main Menu is displayed, proceed to step 8. If Main Menu is not displayed, enter on the Command line: **MAIN<Return>**	Main Menu appears on the display.
8 (RDA Term)	On the Command line, enter: **RELC<Return>**	This accepts control from the RPG.
9 (RDA Term)	On the Command line, enter: **STBY<Return>**	This places the RDA into standby.
10 (RDA Term)	On the Command line, enter: **TERP<Tab>***Password***<Return>**	Terminates application software.
11 (ARCH II Tape Rack)	If Archive II is installed, remove the 8mm Archive II tapes that had data written by Build 1Ø.Ø/1Ø.1. Refill the rack with new tapes and reload into the drive.	Removes all Build 1Ø.Ø/1Ø.1 Archive II tapes, and reloads the drive for use with Build 1Ø.3.

ATTACHMENT 1 (Continued)

SOFTWARE BUILD 10.3 LOAD INSTRUCTIONS

Step	Action/Procedure	Response/Comments
12 (RDA Term)	Press the **<Shift><Port>** keys simultaneously. Wait for the message: `TASKØ2: END OF TASK 255.`	System console is displayed.
13 (SCSI Drive)	Take a blank SCSI tape. Turn the write protect arrow to OFF (pointing away from SAFE). Insert blank SCSI tape in the SCSI tape drive and slide the lever (or turn the lever if older drive) to secure the tape.	Ensure tape is secured in SCSI tape drive. If the SCSI tape drive has not been cleaned recently, perform the 28 day PMI to clean the SCSI tape.
14 (RDA SYS)	At the * prompt, enter: **D TA<Return>**	The only task that should be displayed is TIME; all other tasks are canceled. If so, proceed to step 16. If other tasks are not canceled, note the [taskids] and proceed to step 15.
15 (RDA SYS)	At the * prompt, enter: **CA** *Taskid***<Return>** Where [taskid] is the name of each task that is still open.	Cancels task. Repeat this step for all tasks that need canceling.
16 (RDA SYS)	At the * prompt, while depressing the **<Ctrl>** key, enter: **VV<Return>**	`CDS>` prompt appears. It may take more than one <Return> to get the `CDS>` prompt to appear.
17 (RDA SYS)	At the `CDS>` prompt, enter **KEY 1,***password***<Return>**	
18	Call the Naval Observatory at (2Ø2)762-14Ø1 to acquire the accurate time.	Must set CDS time to UTC time to synchronize the RDA Processor Time of Day Clock to UTC.
19 (RDA SYS)	At the `CDS>` prompt, enter: **TI U,DAY,MM/DD/YYYY,hh:mm,P** Wait until the next step to hit the **<Return>** key.	DAY = First three letters (e.g. TUE) MM = 2 digit month (e.g. Ø1 - 12) DD = 2 digit day (e.g. Ø1 - 31) YYYY = 4 digit year (e.g. 2002) hh = UTC hour (e.g. ØØ - 23) mm = 2 digit minute (e.g. ØØ - 59)
20 (RPG SYS)	At the tone from the time source corresponding to the time entered in step 19, press **<Return>**	Sets the time entered.
21 (RPG SYS)	At the `CDS>` prompt, enter: **TI<Return>**	Verify that the CDS clock time is correct. If the date and time are incorrect return to step 19.

ATTACHMENT 1 (Continued)

SOFTWARE BUILD 10.3 LOAD INSTRUCTIONS

Step	Action/Procedure	Response/Comments
22 (RPG SYS)	At the CDS> prompt, enter: **CO<Return>**	System console mode screen is displayed. You may have to press the **<Return>** key several times. Verify that the * prompt is displayed.
23 (RDA SYS)	At the * prompt, enter: **CA TIME<Return>**	Stops time of day program.
24 (RDA SYS)	At the * prompt, enter: **BGLSETU<Return>**	Loads set time program.
25	Call the Naval Observatory at (2Ø2)762-14Ø1 to acquire the accurate time.	Must set RDA processor time to UTC time to synchronize the RDA Processor Time of Day Clock to UTC.
26 (RDA SYS)	At the SETIME> prompt, enter: **MM/DD/YY,hh:mm:ss** Wait until the next step to hit the **<Return>** key.	Enter the ZULU time to the next minute and seconds as ØØ. It is desirable to set the time within 1 second, although a 1Ø second error is tolerable.
27 (RDA SYS)	At the tone from the time source corresponding to the time entered in step 26 press: **<Return>**	SETTIME: END OF TASK Ø message appears.
28 (RDA SYS)	At the * prompt, enter: **BGLSTART<Return>**	Starts time of day program.
29 (RDA SYS)	At the * prompt, enter: **BACKFILE CON:<Return>**	Loads the backup utility into memory and starts the program. Allows the manual selection of files.
30 (RDA SYS)	At the BACKUP> prompt, enter: **-.-<Return>** **!EXCLUDE UNPACK.CSS<Return>** **./<Return>** Wait for the message: END OF TASK Ø.	Backup process begins. This could take up to 3Ø minutes.

ATTACHMENT 1 (Continued)

SOFTWARE BUILD 10.3 LOAD INSTRUCTIONS

Step	Action/Procedure	Response/Comments
31 (SCSI Drive)	When the transfer is complete, remove the SCSI tape from the SCSI tape drive. Label the tape with the following information: - Current Date - Site ID - RDA Build 1Ø.Ø or 1Ø.1 Backup - Channel # Turn write protect arrow to SAFE.	Tape will not be used during the rest of the load procedures, but needs to be available in case Build 1Ø.Ø/1Ø.1 needs to be reloaded.
32 (SCSI Drive)	Insert the Build 1Ø.3 RDA Applications Software tape in the SCSI tape drive and slide the lever (or turn the lever if older drive) to secure it.	Ensure tape is secured in SCSI tape drive.
33 (RDA SYS)	At the * prompt, enter: **UNPACK<Return>** Wait for the message: `TAPE UNPACK PROCESS COMPLETED.`	Loading of the tape will take approximately 1Ø minutes.
34 (SCSI Drive)	Remove the Build 1Ø.3 RDA Applications Software tape from the tape drive.	Save the tape in a secure place.
35 (RDA SYS)	At the * prompt, enter: **MA DSCØ:,OFF<Return>**	Disk is marked off.
36 (RDA SYS)	At the * prompt, enter: **D D/D<Return>**	`DSCØ D9 ØØØØ OFF` appears. Ensures DSCØ: is off. If not repeat steps 35 and 36.
37 (RDA SYS)	At the * prompt, while depressing the **<Ctrl>** key, enter: **VV<Return>**	`CDS>` prompt appears. It may take more than one <Return> to get the `CDS>` prompt to appear.
38 (RDA SYS)	At the `CDS>` prompt, enter: **PO OFF<Return>** Wait 5 seconds before continuing.	Turns off DC power supplies.
39 (RDA SYS)	At the `CDS>` prompt, enter: **PO ON<Return>**	Turns on DC power supplies and starts RDA initial bootup. It will take approximately 2 minutes for the OS to reboot. The RDA will be in standby condition.

ATTACHMENT 1 (Continued)

SOFTWARE BUILD 10.3 LOAD INSTRUCTIONS

Step	Action/Procedure	Response/Comments
40 (RDA SYS)	Once the RDA logo/banner is displayed, press the **<Shift><Port>** keys simultaneously. Wait for the screen to refresh.	Application mode is displayed. Any alarms shown at this point should be disregarded. Banner should read `NO ALARMS - BUILD 1Ø.3`.
41 (RDA Term)	For FAA sites with RMS installed, on the Command line, enter: **RELC<Return>** otherwise skip to step 42.	Transfers control.
42 (RDA Term)	Wait for the RDA state to transition to `Standby`. On the Command line, enter: **OPER<Return>** Let system run through 3 or 4 volume scans.	Puts system in operate.

AT THIS POINT THE RDA SHOULD BE OPERATIONAL

The RDA is operational if, on the System Screen (Port A), there is the RDA Logo and Tower. On the Applications Monitor (Port B), the four lines of SYSTEM STATUS will be on top, followed by the two lines of the ALARM SCREEN, and then the CONTROL LINES. Proceed to step 51. If the RDA is not operational, proceed to the next step.

NOTE

If the Build 1Ø.3 software load does not operate and Build 1Ø.Ø/1Ø.1 software needs to be reloaded, call the ROC Hotline, and continue with the following instructions.

43 (RDA Term)	On the Command line, enter: **RELC<Return>**	This accepts control from the RPG.
44 (RDA Term)	On the Command line, enter: **STBY<Return>**	This places the RDA into standby.
45 (RDA Term)	On the Command line, enter: **TERP<Tab>***Password***<Return>**	Terminates application software.
46 (SCSI Drive)	Insert the RDA Build 1Ø.1 Backup tape from step 31 in the SCSI tape drive and slide the lever (or turn the lever if older drive) to secure the tape.	Ensure tape is secured in SCSI tape drive.

ATTACHMENT 1 (Continued)

SOFTWARE BUILD 10.3 LOAD INSTRUCTIONS

Step	Action/Procedure	Response/Comments
47 (RDA SYS)	At the * prompt, enter: **UNPACK<Return>** Wait for the message: `END OF TASK Ø.`	This unloads the Build 1Ø.Ø, or 1Ø.1 software onto DSCØ: Reloading may be approximately 3Ø minutes.
48 (SCSI Drive)	When the transfer is complete, remove the SCSI tape from the SCSI tape drive. File it in a safe, yet accessible place.	This saves your backup tape of Build 1Ø.Ø/1Ø.1 software.
49 (RDA SYS)	At the * prompt, enter: **RDAUP<Return>**	Starts up the RDA software. The RDA should now be back to normal operation with Build 1Ø.Ø, or 1Ø.1.
50	Call the OSF Hotline and notify them that Build 1Ø.3 was not able to be loaded successfully. Do not continue the following procedures until build 1Ø.3 is loaded.	This will initiate action within the ROC to research the problem and to further assist in eventually loading Build 1Ø.3. The software load procedures will have to be re-accomplished from the beginning.
	NOTE This procedure requires the installation of software build 1Ø.3 or later. Do not proceed unless software build 1Ø.3 is correctly loaded.	
51 (RDA Term)	With the operational software up and running and at the command line, enter: **STBY<Return>**	Before performing the RF Test Attenuator calibration, it is necessary there be an absence of DC Offset alarms and IF Step Size alarms before continuing.
52 (RDA Term)	At the command line, enter: **TERP<Tab>***password***<Return>**	Terminates the operational program.
53 (RDA Term)	Press the **<Shift><Port>** keys simultaneously. Wait for the message: `TASK Ø2: END OF TASK 255.`	System console is displayed.
54	At the RDA System Console, bring up the RDASOT program by entering the following:	
a. (RDA SYS)	**RDASOT<Return>**	RDASOT Main Menu (Mode Selection Menu for Redundant sites) is displayed.

ATTACHMENT 1 (Continued)

SOFTWARE BUILD 10.3 LOAD INSTRUCTIONS

Step	Action/Procedure	Response/Comments
b. (RDA SYS)	If at a redundant site, enter: **2<Return>** Otherwise, proceed to the next step.	To select LIMITED mode for this procedure at Redundant sites.
c. (RDA SYS)	**3<Return>**	To select the Calibration Menu.
d. (RDA SYS)	**5<Return>**	To select DYN RNG/RF TST ATTN Routines; the DYN Range/RF Test Attenuation Selection Menu will appear.
e. (RDA SYS)	**4<Return>**	To select RF Test Attenuator Step Calculation.
f. (RDA SYS)	**1<Return>**	To select Update RDASOT DEST 9.
NOTE This begins a process whereby each step of the RF Test Attenuator is calibrated by collecting 10 sets of data for each step. The entire process takes approximately 6 minutes to accomplish.		
55	Data for each step is presented on the display pages 1 through 8. To examine each page, enter the page number for each page, followed by the **<Return> key.** Examine the NEW DIF data for each step. The tolerance is less than +/- 1.5 dB for each step from 1 to 59 dB and +/- 2.0 dB for each step from 60 to 103 dB.	
56 (RDA SYS)	After examining all of the steps, enter: **0<Return>** at the RDA System Console.	
57	If all of the steps are in tolerance, update the Adaptation Data by entering **Y** when prompted by the display. Proceed to step 59.	This indicates that the Receiver Channel including the RF Test Attenuator is OK.
58	If one or more of results exceeds the tolerance, contact the Hotline for troubleshooting advice.	

ATTACHMENT 1 (Continued)

SOFTWARE BUILD 10.3 LOAD INSTRUCTIONS

Step	Action/Procedure	Response/Comments
59 (RDA SYS)	Terminate the RDASOT by entering a series of **0<Return>** at the RDA System Console.	
60 (RDA SYS)	At the System Console * prompt, enter: **RDAUP<Return>**	Brings up the operational software.
61 (RDA SYS)	Once the RDA logo/banner is displayed, press the **<Shift><Port>** keys simultaneously. Wait for the screen to refresh.	Application mode is displayed. Any alarms shown at this point should be disregarded. Banner should read `NO ALARMS - BUILD 1Ø.3.`
62 (RDA Term)	For FAA sites with RMS installed, on the Command line, enter: **RELC<Return>** otherwise skip to step 63.	Transfers control.
63 (RDA Term)	On the Command line, enter: **OPER<Return>** Let system run through 3 or 4 volume scans.	Puts system in operate.
64	With the RDA up and running in OPERATE mode, allow sufficient time for the transmitter power output to stabilize.	Takes approximately 20 minutes.
65 (RDA Term)	On the command line, enter: **DIPD<Tab>CAL<Return>**	
66	Record RFD1 calibration data as follows: RFD1 LIN TGT EXPECTED AMP _____DBZ RFD1 LIN TGT MEASURED AMP _____DBZ	
67	Record CAL# _____DB	Also known as Delta SYSCAL.
68	Calculate the RD1 delta as follows: RFD1 delta = RFD1 MEAS - EXPECTED = _____ - _____=_____	Pay close attention to the signs of the data. Note the RFD1 delta. The absolute value should now be less than 1dB. If this is not the case, call the Hotline.

ATTACHMENT 1 (Continued)

SOFTWARE BUILD 10.3 LOAD INSTRUCTIONS

Step	Action/Procedure	Response/Comments
69	Note the difference between delta SYSCAL before and after RF Test Attenuator calibration. This is a measure of the reflectivity error which was caused by improper calibration of the RF Test Attenuator. Reflectivity error = recorded value of step 1a. minus recorded value of step 67 will give you the reflectivity error. = _____ - _____ = _____ step 1a. step 67	Note the Reflectivity Error. If the absolute value of the reflectivity error exceeds 1.0dB, call the Hotline.
70 (RDA Term)	On the Command line, enter: **STBY<Return>**	Places the radar into standby.
71 (RDA Term)	If RDA appears to be working, at the Command line, enter: **TERP<Tab>***Password***<Return>**	Terminates application software.
72 (RDA Term)	Press the **<Shift><Port>** keys simultaneously. Wait for the message: `TASK Ø2: END OF TASK 255.`	System console is displayed.
73 (SCSI Drive)	Take a blank SCSI tape. Turn the write protect arrow to OFF (pointing away from SAFE). Insert blank SCSI tape in the SCSI tape drive and slide the lever (or turn the lever if older drive) to secure the tape.	Ensure tape is secured in SCSI tape drive. This tape will become the backup tape of RDA Build 1Ø.3.
74 (RDA SYS)	At the * prompt, enter: **D TA<Return>**	The only task that should be displayed is TIME; all other tasks are canceled. If so, proceed to step 76. If other tasks are not canceled, note the taskid's and proceed to step 75.
75 (RDA SYS)	At the * prompt, enter: **CA** *Taskid***<Return>**	Cancels task. Repeat this step for all tasks that need canceling.
76 (RDA SYS)	At the * prompt, enter: **BACKFILE CON:<Return>**	Loads the backup utility into memory and starts the program. Allows the manual selection of files.

ATTACHMENT 1 (Continued)

SOFTWARE BUILD 10.3 LOAD INSTRUCTIONS

Step	Action/Procedure	Response/Comments
77 (RDA SYS)	At the BACKUP> prompt, enter: **-.-<Return>** **!EXCLUDE UNPACK.CSS<Return>** **./<Return>** Wait for the message: END OF TASK Ø.	Backup process begins. This could take up to 3Ø minutes.
78 (SCSI Drive)	When the transfer is complete, remove the SCSI tape from the SCSI tape drive. Label the tape with the following information: - Current Date - Site ID - RDA Build 1Ø.3 Backup - Channel # Turn write protect arrow to SAFE.	Store all the tapes in a safe, but accessible location. The tapes should be accessible in case the software needs to be reloaded.
79 (RDA SYS)	At the * prompt, enter: **RDAUP<Return>**	Starts up the RDA software.
80 (RDA SYS)	Once the RDA logo/banner is displayed, press the **<Shift><Port>** keys simultaneously. Wait for the screen to refresh.	Application software is displayed.
81 (RDA Term)	For FAA sites with RMS installed, on the Command line, enter: **RELC<Return>** otherwise skip to the note below.	Transfers control.
NOTES Repeat steps 2 through 81 for the second RDA, Channel 2. The RDA(s) should now be in normal operation with Build 1Ø.3		
82 (RDA Term)	When the STAT goes to STBY, enter on the Command line: **OPER<Return>**	This turns the RDA into operate mode, and the antenna should start rotating.
83 (RDA Term)	If Archive II is installed, on the Command line, enter: **ARCH<Return>**	Restarts Archive II.
84 (RDA Term)	On the Command line, enter: **ENRC<Return>**	Control of the radar is sent back to the RPG.

ATTACHMENT 1 (Continued)

SOFTWARE BUILD 10.3 LOAD INSTRUCTIONS

Step	Action/Procedure	Response/Comments
85 (RPG HCI)	At the RPG HCI, select **Alarms** in the RDA box. Use the snapshots captured earlier to compare alarms.	Verify there are no new RDA alarms.

ATTACHMENT 2

SNAPSHOT INSTRUCTIONS

Snapshot is an application that runs on each of the Sun processors used with any RPG. It is a graphics capture program that will, in effect, take a picture of any window, region, or screen that is in view on any workspace of the processor. The images can then be edited, printed, or saved to disk. Snapshot can be used to make visual records of graphical images such as screen anomalies and adaptation data.

The following procedures assume that when directed to "click" on an item, it is referring to the left mouse button, unless directed differently. The phrase "button 1" also refers to the left mouse button.

The adaptation data and status windows print procedure is to be completed prior to loading Software Build 10.3. This procedure can be accomplished 2 to 3 weeks prior to the loading of Build 10.3 software. This section of the attachment lists each window to be captured and printed, and describes how to access each window. This section is divided into two areas - Adaptable Parameters and Operational Status.

RPG Status:

From the RPG HCI, click on **Status** within the RPG area. The RPG Status window will appear. Click on status within the Message Filters area to deselect. If there are system alarms or errors, they will appear in the status window. Capture this window.

RDA Alarms

NOTES

The following steps are intended to be the basic procedures for using Snapshot to capture graphic images. The Snapshot application has several additional features not covered here that can be employed to manipulate images of captured graphics and to produce various print effects.

A printer is only configured at the MSCF. The ORPG and BDDS do not have a printer installed. It will be necessary to save the images to a floppy and transfer them to a machine that has a printer associated to it.

1. If not already visible, ensure the window to be captured is visible on one of the CDE desktops. Recommend all other windows be minimized to reduce screen clutter while capturing each graphic image for print.

2. To start the Snapshot application, right click on an open area of the same desktop the image is located on. The `Workspace Menu` will drop down.

ATTACHMENT 2 (Continued)

SNAPSHOT INSTRUCTIONS

NOTE

Image Viewer can also be started directly from the command line of a terminal window by entering: **sdtimage -snapshot&**

3. Click on **Applications**. The `Applications` menu will drop down.

4. Click on **Snapshot**. The two drop down menus will close and two new windows will open. The window titles are `Image Viewer - Snapshot and Image Viewer - (None)` (as shown in Figure 1). Once the selected window image is saved, `None` will be replaced by the filename.

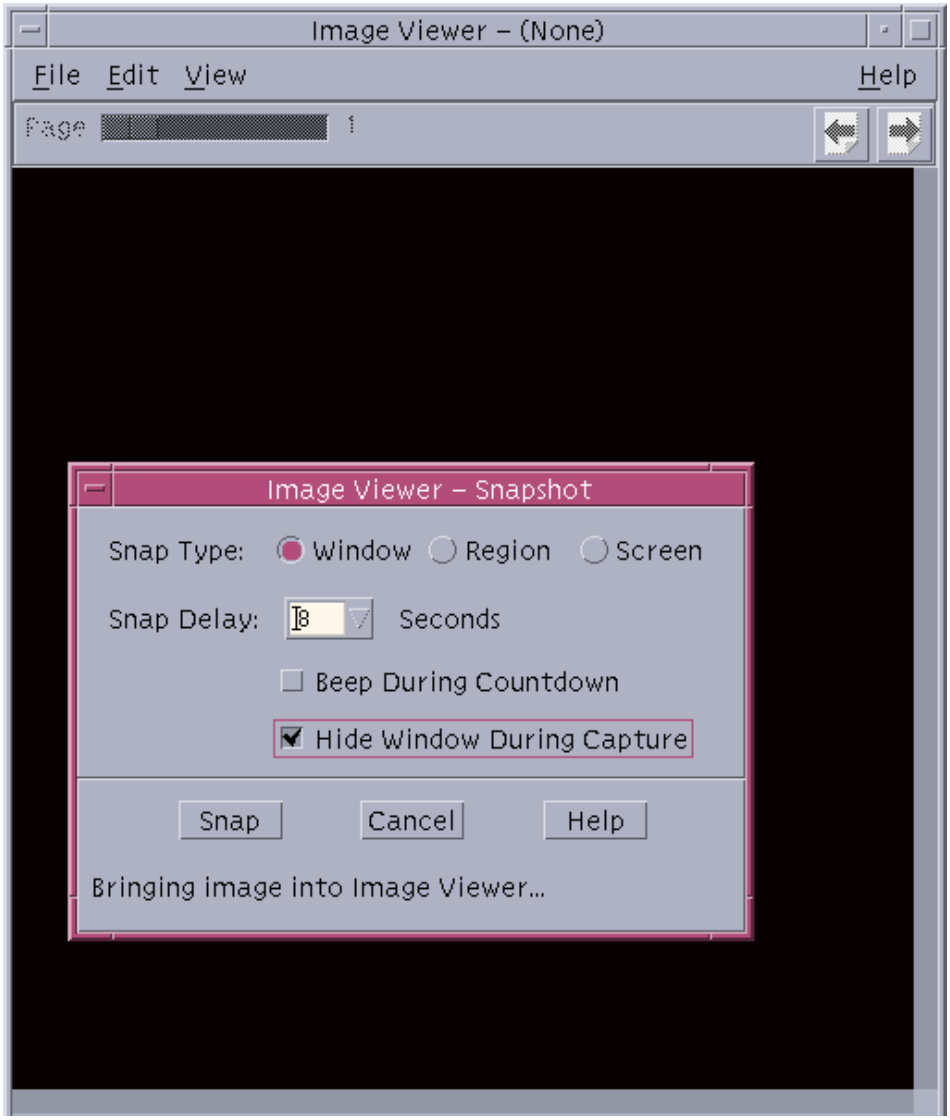


Figure 1 Image Viewer - Snapshot and blank Image Viewer before snapping any image.

ATTACHMENT 2 (Continued)

SNAPSHOT INSTRUCTIONS

5. Using the mouse, check the box next to `Hide Window During Capture` to avoid having any portions of the Snapshot windows included in the picture. A check mark will appear in the box and `Snap Delay` time will automatically change to 8 seconds. The bottom of the window will display the message `Timer adjusted to guarantee correct operation`.

6. Click on the **Snap** button. The bottom of the window displays the message `Use Button 1 to select the window, Esc to cancel`. The mouse pointer changes to crosshairs.

NOTE

When taking a snapshot of a menu or some other pop-up or pull-down element, you can delay the time between clicking *Snap* and the snapshot actually being taken by increasing the number of *Snap Delay* seconds. After clicking on the `Snap` button, use the extra seconds to bring up the menu or pop-up/pull-down in the window or region being snapped.

7. Click the crosshair pointer inside the window to be captured. The `Snapshot` window will disappear and then reappear 8 seconds later. The message at the bottom of the `Snapshot` window will read `Snap succeeded` once the snapping process is complete. The `Image Viewer - Untitled` window (see Figure 2), displaying the newly snapped image, and an `Image Viewer – Palette` window will also appear.

Category	Units	Min	Max	Th1	Th2	Th3	Th4	Th5	Th6
Velocity	kts	0	246	15	25	35	45	50	60
Composite Refl	dBZ	-32	95	20	30	40	50	60	70
Echo Tops	kft	0	70	30	40	50	60		
SVR Wx Prob	%	0	100	30	40	50	60	70	
VIL	kg/m2	0	80	35	40	45	50	55	65

Figure 2 Image Viewer - Untitled Window

ATTACHMENT 2 (Continued)

SNAPSHOT INSTRUCTIONS

NOTES

If the `Hide Window During Capture` button was not checked, the `Snapshot` window will remain visible with the message `Bringing image into Image Viewer` visible at the bottom. If the `Snapshot` and `Image Viewer` windows are obscuring any area of the window being snapped then those parts of those windows will be included in the resulting image (as shown in Figure 3).

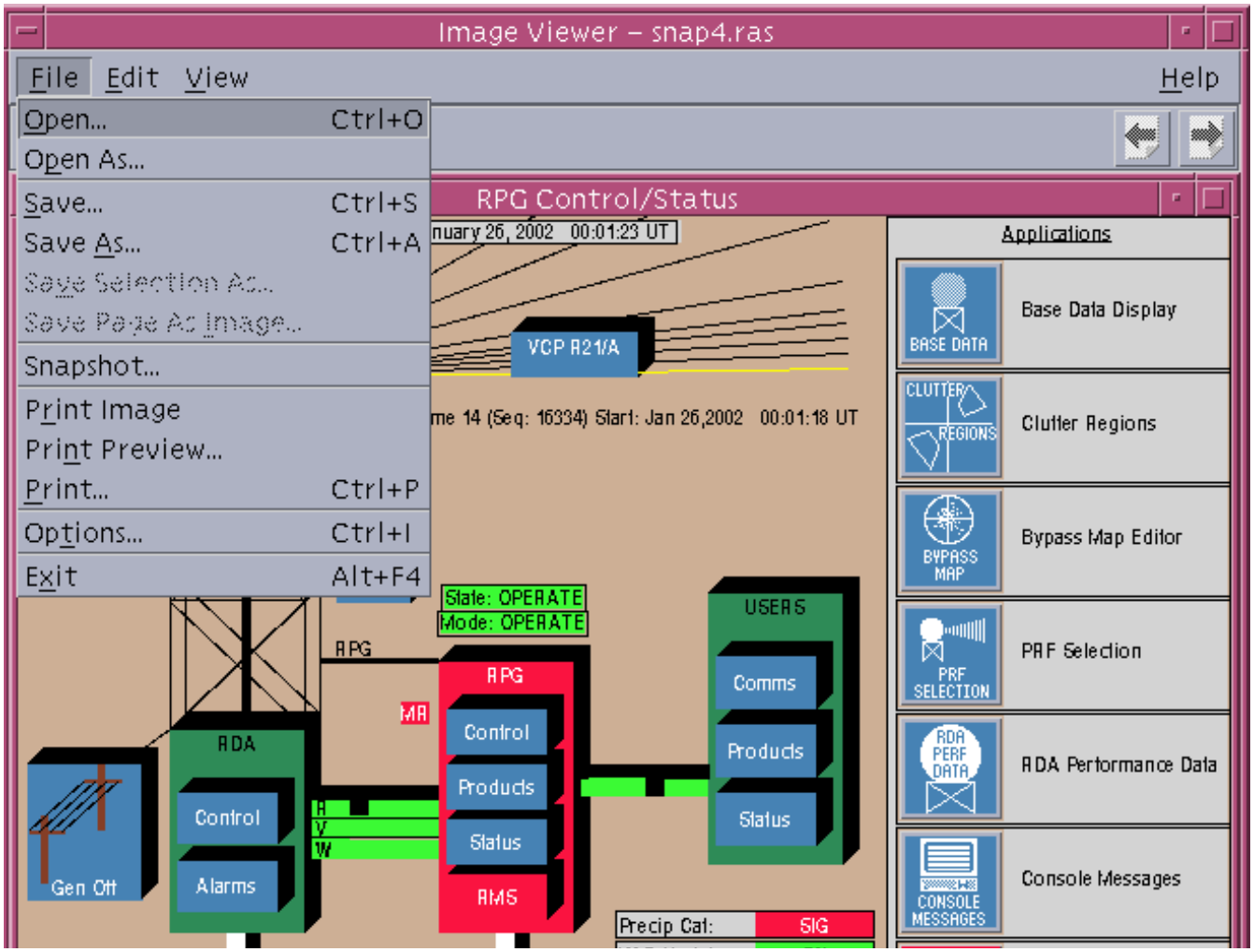


Figure 3 Image Viewer with Snapped Image Showing Drop-Down File Menu

ATTACHMENT 2 (Continued)

SNAPSHOT INSTRUCTIONS

NOTE

Before printing, ensure there is a printer connected to the system. If not, use the UNIX *ftp* utility or save the image to removable media to move the image file to a system having print capabilities such as an MSCF.

8. To print the image, click on **File** on the menu bar of the `Image Viewer` and click on **Print** from the drop down menu.

NOTE

The MSCF Phaser 750 color laser printer is very slow. Observe the feedback window on the printer to verify the printer is turned on and is processing the print task.

9. In the `Image Viewer - Print` window, change the `Image Size:` to **85%** using the slider bar, and then change the `Image Orientation:` to **Landscape**. Check the **Centered** button to place the image in the center of the print preview box, then click on the **Print** button at bottom of the `Image Viewer - Print` window. The `Image Viewer - Print` windows will disappear and the printer will produce the desired picture. At the bottom of the `Image Viewer - Print` window, the message `Print job queued` will appear.

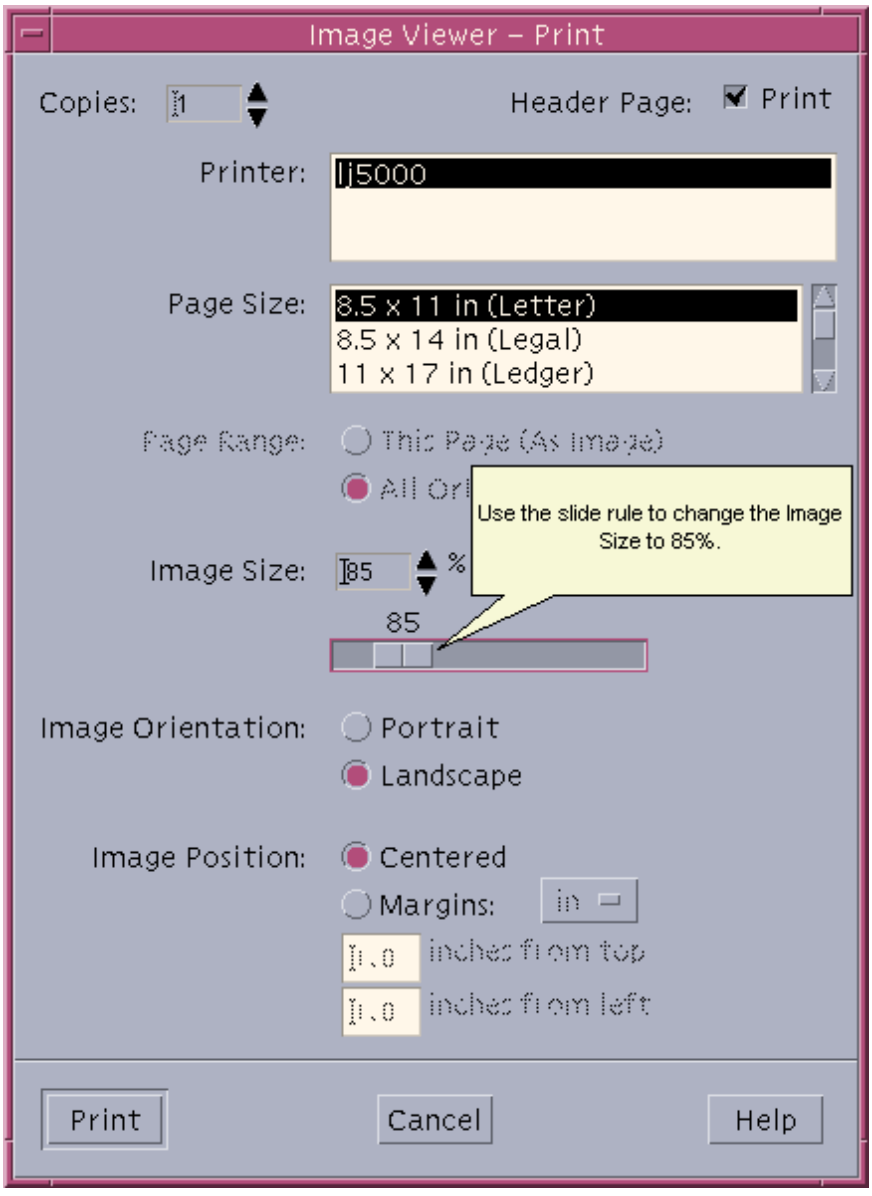


Figure 4 Image Viewer - Print Dialog Window

10. After the first image is finished printing and using the list of screens to capture, bring up the next window to capture.

11. Return to the `Image viewer - Snapshot` window by clicking anywhere in the **Image viewer - Snapshot** window.

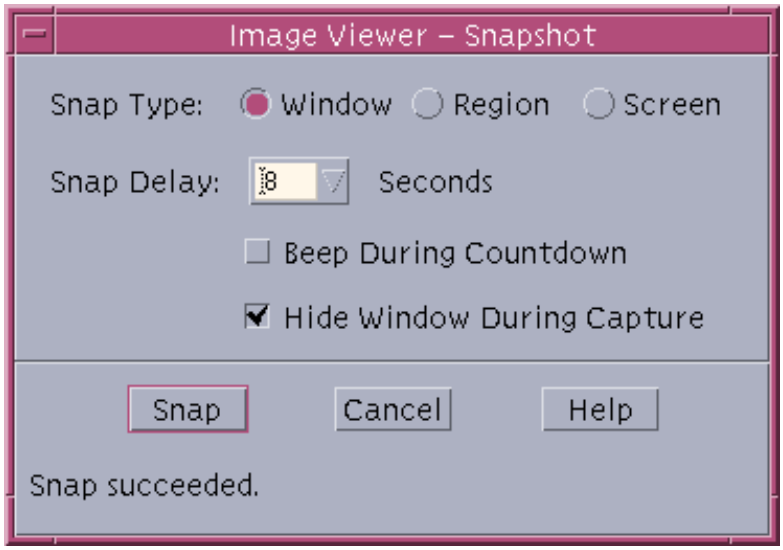


Figure 5 Image Viewer - Snapshot window

12. In the `Image Viewer - Snapshot` window, click on the **Snap** button. The `Image Viewer - Save Snapshot?` window appears, with the message `Snapshot image not saved. Do you want to save the image?`. Click on the **No** button.

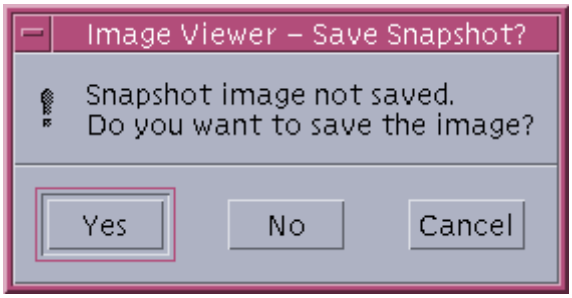


Figure 6 Image Viewer - Save Snapshot? Window

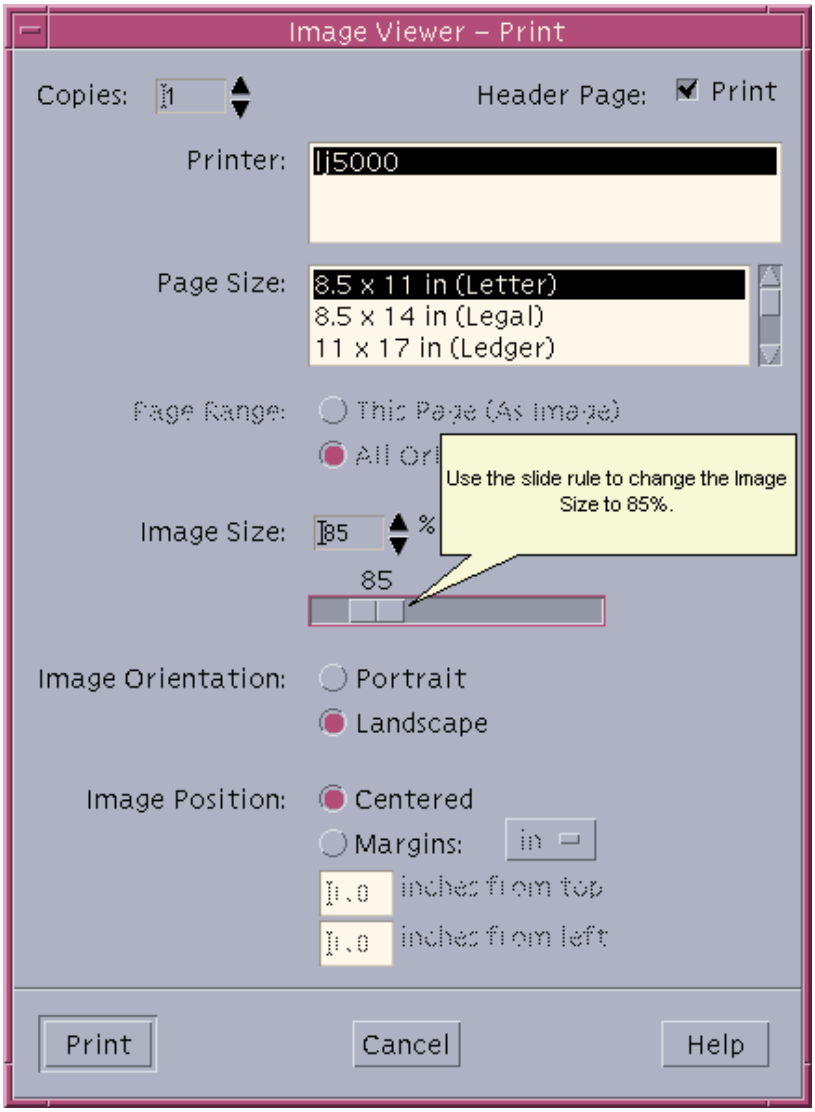
13. Click on the window to print. In approximately 8 seconds a new figure will appear in the `Image Viewer - Untitled` window.

14. In the `Image Viewer - Untitled` window, click on **File** and then click on the **Print...** option from the pull down menu.

ATTACHMENT 2 (Continued)

SNAPSHOT INSTRUCTIONS

15. In the `Image Viewer - Print` window, change the `Image Size:` to **85%** using the slider bar, and then change the `Image Orientation:` to **Landscape**. Check the **Centered** button to place the image in the center of the print preview box, then click on the **Print** button at bottom of the `Image Viewer - Print` window. The `Image Viewer - Print` windows will disappear and the printer will produce the desired picture. At the bottom of the `Image Viewer - Print` window, the message `Print job queued` will appear.



16. Repeat steps 10 through 15 until all of the desired screens are captured and printed.

17. Return to ATTACHMENT 1.

ATTACHMENT 3

EFFECTIVITY

NWS

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
	Eastern Region			
ALBANY	EAST BERNE, NY	RDA	ENX	WN9518
BINGHAMTON	BINGHAMTON, NY	RDA	BGM	WN9515
BOSTON	TAUNTON, MA	RDA	BOX	WN9509
BROOKHAVEN	UPTON, NY	RDA	OKX	WN9912
BUFFALO	BUFFALO, NY	RDA	BUF	WN9528
BURLINGTON	COLCHESTER, VT	RDA	CXX	WN9617
CARIBOU	HOULTON, ME	RDA	CBW	WN9712
CHARLESTON, SC	GRAYS, SC	RDA	CLX	WN9208
CHARLESTON, WV	CHARLESTON, WV	RDA	RLX	WN9414
CINCINNATI	WILMINGTON, OH	RDA	ILN	WN9710
CLEVELAND	CLEVELAND, OH	RDA	CLE	WN9524
COLUMBIA	WEST COLUMBIA, SC	RDA	CAE	WN9310
GREER	GREER, SC	RDA	GSP	WN9312
MOREHEAD CITY	NEWPORT, NC	RDA	MHX	WN9307
NORFOLK	WAKEFIELD, VA	RDA	AKQ	WN9952
PHILADELPHIA	FORT DIX, NJ	RDA	DIX	WN9950
PITTSBURGH	CORAOPOLIS, PA	RDA	PBZ	WN9917
PORTLAND, ME	GRAY, ME	RDA	GYX	WN9938
RALEIGH/DURHAM	CLAYTON, NC	RDA	RAX	WN9306

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
ROANOKE	ROANOKE, VA	RDA	FCX	WN9954
STATE COLLEGE	STATE COLLEGE, PA	RDA	CCX	WN9925
STERLING	STERLING, VA	RDA	LWX	WN9931
WILMINGTON	SHALLOTTE, NC	RDA	LTX	WN9301
	Southern Region			
ALBUQUERQUE	ALBUQUERQUE, NM	RDA	ABX	WP9365
AMARILLO	AMARILLO, TX	RDA	AMA	WP9363
ATLANTA	PEACHTREE CITY, GA	RDA	FFC	WP9219
AUSTIN/SAN ANTONIO	NEW BRAUNFELS, TX	RDA	EWX	WP9253
BIRMINGHAM	ALABASTER, AL	RDA	BMX	WP9957
BROWNSVILLE	BROWNSVILLE, TX	RDA	BRO	WP9250
CORPUS CHRISTI	CORPUS CHRISTI, TX	RDA	CRP	WP9251
DALLAS/FT WORTH	FORT WORTH, TX	RDA	FWS	WP9259
EL PASO	SANTA TERESA, NM	RDA	EPZ	WP9270
HOUSTON	DICKINSON, TX	RDA	HGX	WP9935
JACKSON, MS	JACKSON, MS	RDA	JAN	WP9235
JACKSONVILLE	JACKSONVILLE, FL	RDA	JAX	WP9206
KEY WEST	BOCA CHICA KEY, FL	RDA	BYX	WP9201
KNOXVILLE	MORRISTOWN, TN	RDA	MRX	WP9325
LAKE CHARLES	LAKE CHARLES, LA	RDA	LCH	WP9240
LITTLE ROCK	NORTH LITTLE ROCK, AR	RDA	LZK	WP9340

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
LUBBOCK	LUBBOCK, TX	RDA	LBB	WP9933
MELBOURNE	MELBOURNE, FL	RDA	MLB	WP9204
MEMPHIS	MILLINGTON, TN	RDA	NQA	WP9334
MIAMI	MIAMI, FL	RDA	AMX	WP9918
MIDLAND/ODESSA	MIDLAND, TX	RDA	MAF	WP9265
MOBILE	MOBILE, AL	RDA	MOB	WP9223
NASHVILLE	OLD HICKORY, TN	RDA	OHX	WP9327
NORMAN	MIDWEST CITY, OK	RDA	TLX	WP9921
NORTHEAST ALABAMA	HYTOP, AL	RDA	HTX	WP9913
SAN ANGELO	SAN ANGELO, TX	RDA	SJT	WP9263
SHREVEPORT	SHREVEPORT, LA	RDA	SHV	WP9248
SLIDELL	SLIDELL, LA	RDA	LIX	WP9919
TALLAHASSEE	TALLAHASSEE, FL	RDA	TLH	WP9214
TAMPA	RUSKIN, FL	RDA	TBW	WP9961
TULSA	INOLA, OK	RDA	INX	WP9356
WESTERN ARKANSAS	CHAFFEE RIDGE, AR	RDA	SRX	WP9356
	Central Region			
ABERDEEN	ABERDEEN, SD	RDA	ABR	WR9659
BISMARCK	BISMARCK, ND	RDA	BIS	WR9764
CHEYENNE	CHEYENNE, WY	RDA	CYS	WR9564
CHICAGO	ROMEOVILLE, IL	RDA	LOT	WR9969

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
DENVER	FRONT RANGE AP, CO	RDA	FTG	WR9469
DES MOINES	JOHNSTON, IA	RDA	DMX	WR9546
DETROIT	WHITE LAKE, MI	RDA	DTX	WR9954
DODGE CITY	DODGE CITY, KS	RDA	DDC	WR9451
DULUTH	DULUTH, MN	RDA	DLH	WR9745
FARGO/GRAND FORKS	GRAND FORKS, ND	RDA	MVX	WR9750
GOODLAND	GOODLAND, KS	RDA	GLD	WR9465
GRAND ISLAND	BLUE HILL, NE	RDA	UEX	WR9552
GRAND JUNCTION (RDA 1)	GRAND JUNCTION, CO	RDA	GJX	WR9476
GRAND JUNCTION (RDA 2)	GRAND JUNCTION, CO	RDA	GJX	WR9476
GRAND RAPIDS	GRAND RAPIDS, MI	RDA	GRR	WR9635
GREEN BAY	GREEN BAY, WI	RDA	GRB	WR9645
INDIANAPOLIS	INDIANAPOLIS, IN	RDA	IND	WR9438
JACKSON, KY	JACKSON, KY	RDA	JKL	WR9956
LA CROSSE	LA CROSSE, WI	RDA	ARX	WR9643
LINCOLN	LINCOLN, IL	RDA	ILX	WR9436
LOUISVILLE	FORT KNOX, KY	RDA	LVX	WR9423
MARQUETTE	NEGAUNEE, MI	RDA	MQT	WR9743
MILWAUKEE	DOUSMAN, WI	RDA	MKX	WR9965
MINNEAPOLIS	CHANHASSEN, MN	RDA	MPX	WR9658
NCL MICHIGAN	GAYLORD, MI	RDA	APX	WR9610
NORTH PLATTE	NORTH PLATTE, NE	RDA	LNX	WR9562

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
NORTHERN INDIANA	NORTH WEBSTER, IN	RDA	IWX	WR9534
OMAHA	VALLEY, NE	RDA	OAX	WR9553
PADUCAH	PADUCAH, KY	RDA	PAH	WR9957
PLEASANT HILL	PLEASANT HILL, MO	RDA	EAX	WR9446
PUEBLO	PUEBLO, CO	RDA	PUX	WR9464
QUAD CITIES	DAVENPORT, IA	RDA	DVN	WR9544
RAPID CITY	NEW UNDERWOOD, SD	RDA	UDX	WR9662
RIVERTON/LANDER	RIVERTON, WY	RDA	RIW	WR9576
SIOUX FALLS	SIOUX FALLS, SD	RDA	FSD	WR9651
SPRINGFIELD	SPRINGFIELD, MO	RDA	SGF	WR9440
ST LOUIS	WELDON SPRING, MO	RDA	LSX	WR9971
TOPEKA	TOPEKA, KS	RDA	TWX	WR9456
WICHITA	WICHITA, KS	RDA	ICT	WR9450
	Western Region			
BILLINGS	BILLINGS, MT	RDA	BLX	WT9677
BOISE	BOISE, ID	RDA	CBX	WT9681
CEDAR CITY (RDA 1)	CEDAR CITY, UT	RDA	ICX	CONCDC
CEDAR CITY (RDA 2)	CEDAR CITY, UT	RDA	ICX	CONCDC
ELKO (RDA 1)	ELKO, NV	RDA	LRX	WT9903
ELKO (RDA 2)	ELKO, NV	RDA	LRX	WT9903
EUREKA (BUNKER HILL)	EUREKA, CA	RDA	BHX	WT9594

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
FLAGSTAFF (RDA 1)	FLAGSTAFF, AZ	RDA	FSX	WT9375
FLAGSTAFF (RDA 2)	FLAGSTAFF, AZ	RDA	FSX	WT9375
GLASGOW	GLASGOW, MT	RDA	GGW	WT9768
GREAT FALLS	GREAT FALLS, MT	RDA	TFX	WT9950
LAS VEGAS	LAS VEGAS, NV	RDA	ESX	WT9386
LOS ANGELES	LOS ANGELES, CA	RDA	VTX	WT9295
MEDFORD (RDA 1)	MEDFORD, OR	RDA	MAX	WT9597
MEDFORD (RDA 2)	MEDFORD, OR	RDA	MAX	WT9597
MISSOULA (RDA 1)	MISSOULA, MT	RDA	MSX	WT9773
MISSOULA (RDA 2)	MISSOULA, MT	RDA	MSX	WT9773
PENDLETON	PENDLETON, OR	RDA	PDT	WT9688
PHOENIX	PHOENIX, AZ	RDA	IWA	WT9278
POCATELLO	SPRINGFIELD, ID	RDA	SFX	WT9578
PORTLAND, OR	PORTLAND, OR	RDA	RTX	WT9698
RENO (RDA 1)	NIXON, NV	RDA	RGX	WT9488
RENO (RDA 2)	NIXON, NV	RDA	RGX	WT9488
SACRAMENTO	DAVIS, CA	RDA	DAX	WT9914
SALT LAKE CITY (RDA 1)	SALT LAKE CITY, UT	RDA	MTX	WT9932
SALT LAKE CITY (RDA 2)	SALT LAKE CITY, UT	RDA	MTX	WT9932
SAN DIEGO	SAN DIEGO, CA	RDA	NKX	WT9918
SAN FRANCISCO	LOS GATOS, CA	RDA	MUX	WT9933
SAN JOAQUIN VALY	HANFORD, CA	RDA	HNX	WT9389

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
SANTA ANA MTS	SANTA ANA MOUNTAINS, CA	RDA	SOX	WT9918
SEATTLE	EVERETT, WA	RDA	ATX	WT9922
SPOKANE	SPOKANE, WA	RDA	OTX	WT9785
TUCSON	TUCSON, AZ	RDA	EMX	WT9274
YUMA (RDA 1)	YUMA, AZ	RDA	YUX	WT9278
YUMA (RDA 2)	YUMA, AZ	RDA	YUX	WT9278
Miscellaneous				
NRC #1	KANSAS CITY, MO	RDA	NRCM7	WG9163
NRC #2	KANSAS CITY, MO	RDA	NRCM7	WG9163
NSSL (RDA/ONAN GEN/PDST)	NORMAN, OK	RDA	NORO2	MAG000
NWSHQ TESTBED (RDASIM)	SILVER SPRING, MD	RDA		WG9310
OPEN SYSTEMS (ONAN GEN)	NORMAN, OK	RDA		WG9420
OSF ENGINEERING (XTMR)	NORMAN, OK	RDA		WG9430
PRC (RDASIM/RPG)	RESTON, MD	RDA	PRCV2	WG9310
ROC FAA REDUNDANT (RDA 1)	NORMAN, OK	RDA	CRIO2	WG9410
ROC FAA REDUNDANT (RDA 2)	NORMAN, OK	RDA	CRIO2	WG9410
TRAINING CENTER #1 NWSTC	KANSAS CITY, MO	RDA	TTCM7	WB9612
TRAINING CENTER #2 NWSTC	KANSAS CITY, MO	RDA	TTCM7	WB9612

DoD

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
ALTUS AFB	FREDERICK, OK	RDA	FDR	FE4419
ANDERSEN AFB	ANDERSEN AFB, GU	RDA	UAM	FE5240
BEALE AFB	OROVILLE, CA	RDA	BBX	FE4686
CAMP HUMPHREYS	CAMP HUMPHREYS, KO	RDA	PTK	FI5294
CANNON AFB	FIELD, NM	RDA	FDX	FE4855
COLUMBUS AFB	GREENWOOD SPRINGS, MS	RDA	GWX	FE3022
DOVER AFB	ELLENDALE STATE FOREST, DE	RDA	DOX	FE4497
DYESS AFB	MORAN, TX	RDA	DYX	FE4661
EDWARDS AFB	BORON, CA	RDA	EYX	FE2805
EGLIN AFB	RED BAY, FL	RDA	EVX	FE2823
FT CAMPBELL	TRENTON, KY	RDA	HPX	FY4812
FT DRUM	MONTAGUE, NY	RDA	TYX	FY4846
FT HOOD	GRANGER, TX	RDA	GRK	FY4824
FT POLK	FT POLK, LA	RDA	POE	FY4825
FT RUCKER	ECHO, AL	RDA	EOX	FY4805
HOLLOMAN AFB	RUIDOSO, NM	RDA	HDX	FE4801
KADENA AB	KADENA AB, JA	RDA	KAD	FH5270
KEESLER AFB MNTC TRNG A	KEESLER AFB, MS	RDA	BIX	FE3010
KEESLER AFB MNTC TRNG B	KEESLER AFB, MS	RDA	BIX	FE3010
KUNSAN AB	KUNSAN AB, KO	RDA	KUZ	FH5284
LAJES AB	SANTA BARBARA, AZR	RDA	PLA	FE4486
LAUGHLIN AFB	BRACKETVILLE, TX	RDA	DFX	FE3099

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
MAXWELL AFB	CARRVILLE, AL	RDA	MXX	FE3300
MINOT AFB	DEERING, ND	RDA	MBX	FE4528
MOODY AFB	SOUTH STOCKTON, GA	RDA	VAX	FE4830
ROBINS AFB	JEFFERSONVILLE, GA	RDA	JGX	FE2067
VANCE AFB	CHEROKEE, OK	RDA	VNX	FE3029
VANDENBERG AFB	ORCUTT, CA	RDA	VBX	FE4610

FAA

ANCHORAGE FAA (RDA 1)	KENAI, AK	RDA	AHG	6901AJ
ANCHORAGE FAA (RDA 2)	KENAI, AK	RDA	AHG	6901AJ
BETHEL FAA (RDA 1)	BETHEL, AK	RDA	ABC	690112
BETHEL FAA (RDA 2)	BETHEL, AK	RDA	ABC	690112
FAIRBANKS FAA (RDA 1)	FAIRBANKS, AK	RDA	APD	690178
FAIRBANKS FAA (RDA 2)	FAIRBANKS, AK	RDA	APD	690178
KAMUELA/KOHALA APT (RDA 1)	KAMUELA, HI	RDA	HKM	699235
KAMUELA/KOHALA APT (RDA 2)	KAMUELA, HI	RDA	HKM	699235
KING SALMON FAA (RDA 1)	KING SALMON, AK	RDA	AKC	690137
KING SALMON FAA (RDA 2)	KING SALMON, AK	RDA	AKC	690137
MIDDLETON ISLAND (RDA 1)	MIDDLETON ISLAND, AK	RDA	AIH	690140
MIDDLETON ISLAND (RDA 2)	MIDDLETON ISLAND, AK	RDA	AIH	690140
MOLOKAI FAA (RDA 1)	MOLOKAI, HI	RDA	HMO	699213
MOLOKAI FAA (RDA 2)	MOLOKAI, HI	RDA	HMO	699213

ATTACHMENT 3 (Continued)

EFFECTIVITY

NEXRAD Site Name	City, ST	EQP	SID	ORG Code
NOME FAA (RDA 1)	NOME, AK	RDA	AEC	690147
NOME FAA (RDA 2)	NOME, AK	RDA	AEC	690147
SAN JUAN FAA (RDA 1)	SAN JUAN, PR	RDA	JUA	69F362
SAN JUAN FAA (RDA 2)	SAN JUAN, PR	RDA	JUA	69F362
SITKA FAA (RDA 1)	BIORKA ISLAND, AK	RDA	ACG	690141
SITKA FAA (RDA 2)	BIORKA ISLAND, AK	RDA	ACG	690141
SOUTH KAUAI FAA (RDA 1)	SOUTH KAUAI, HI	RDA	HKI	699211
SOUTH KAUAI FAA (RDA 2)	SOUTH KAUAI, HI	RDA	HKI	699211
SOUTH SHORE FAA (RDA 1)	NAALEHU, HI	RDA	HWA	699201
SOUTH SHORE FAA (RDA 2)	NAALEHU, HI	RDA	HWA	699201

NWS: EHB-6, Software Note 20
DoD: TO 31P1-4-108-602
FAA: EEM Modification Handbook 6345.1 CHG 31, Chap 28

ATTACHMENT 4

SOFTWARE BUILD 10.3 LOAD COMPLETION FORM

DoD and FAA only will complete this form

Site Name: _____

Site Identifier: _____

Total Time to Complete this Modification Document: _____

Technician's Name(s): _____

Technician's Phone Number: _____

Date Completed: _____

Problem(s) Encountered:

_____

_____

_____

_____

Upon completion of this form, return the information to the ROC using one of the four methods below:

1. Mailing Address: Program Branch, Retrofit Management Team
   WSR-88D Radar Operation Center
   3200 Marshall Ave., Suite 101
   Norman, OK 73072-8028

2. FAX Number: (405) 366-6553
   ATTN: Retrofit Management Team

3. E-mail Address: NEXRAD.Logistics@noaa.gov

4. Web Version: http://www.roc.noaa.gov/ssb/logistics/completion.asp

ENGINEERING MANAGEMENT REPORTING SYSTEM
MAINTENANCE RECORD

Document Number: G 51301

General Information

1. Open Date	Time	2. Initials	3. Response Priority (check one)	4. Close Date	Time
09 / 23 / 02	0900	DKR	○ Immediate ○ Low ○ Routine ☒ Not Applicable	09 / 23 / 02	1300

5. Description: INSTALL NEW SOFTWARE IAW SOFT NOTE 20

Equipment Information

6. Station ID	7. Equipment Code	8. Serial Number	9. TM	10. AT	11. How Mal.
RLX	RDA	AY39523001	M	M	999

12. *EQUIPMENT OPERATIONAL STATUS TIMES*

a. Fully Operational	b. Logistics Delay	Partly Operational c. All Other	d. Logistics Delay	Not Operational e. All Other
				4:00

13. *Parts Failure Information*

Block #	a. ASN	b. NSN	c. TM	d. AT	e. How Mal.	f. Qty.	g. Maint. Hrs.
1							
2							
3							
4							
5							

14. *Work Load Information*

Type	Staff Hrs.
a. Routine	
b. Non-routine	
c. Travel	
d. Misc.	4:00
e. Overtime	

Miscellaneous Information

15. Maintenance Comments: INSTALLED RDA SOFTWARE BUILD 10.3

16. Initials: DKR

17. *SPECIAL PURPOSE REPORTING*	a. Mod. No.	b. Mod./Act./Deact.Date	c.	d.	e.
	S20	09/23/02			

18. *CONFIGURATION MGMT. REPORTING* (use as directed)	ASN	Vendor Part Number (New Part)	Serial Number (Old Part)	Serial Number (New Part)

Sample

ATTACHMENT 7